

How to handle MMS !

MMS (=Methyl-methansulfonate, $\text{CH}_3\text{SO}_3\text{CH}_3$, M_r 110.13) is used in the laboratory for mutagenesis and DNA repair studies. Therefore, it is obvious that **MMS** is **toxic** and **mutagenic**, although it has not been assigned to a toxicity class.

MMS is purchased as a liquid solution and stored at 4°C in the refrigerator. You need prior approval by Dr. Heyer to order.

Working with **MMS** requires lab coat, gloves and eye protection by glasses. Pipetting of the concentrated stock solution **MUST** be done in the designated hood. Pouring of plates **MUST** be done in the designated hood. Avoid inhalation.

Using **MMS** in liquid cultures requires that the liquid culture is set up in plastic tubes or flasks that no breakage can occur. Mark liquid cultures to indicate that they contain **MMS**. Mark plates to indicate that they contain **MMS**. Put the **MMS** magnet label and your name on the incubator/shaker to indicate that **MMS** cultures/plates are present.

In case of spills involving **MMS** or in case you want deliberately inactivate **MMS** use an equal volume of cold 10% Na-thiosulfate solution for quenching. In case of contact flush with copious amounts of water and remove contaminated clothing and shoes immediately.

How to handle velvets from MMS plates !

Always label containers with MMS velvets and keep these velvets separate.

Collect MMS velvets separately in a bucket with water.

When a number accumulates transfer velvets to 10% Na-thiosulfate and put in coldroom over night.

Rinse velvets 10 times in water and autoclave with a liquid cycle for 10-20 min.

Rinse and label as MMS velvet. Hand to Dr. Heyer for washing.